AUTROSAFE IFG 4

A new level in integrated fire and gas detection systems

Autronica Fire and Security AS – Protecting life, environment and property...

AUTRONICA
A UTC Fire & Security Company

PROVEN, RELIABLE AND NOW EVEN BETTER

AUTRO SAFE IFG
Integrated Fire & Gas
Self Verify®

AUTROSAFE IFG 4

– the next generation in fire and gas safety

Our task was demanding, yet simple: Take the best fire and gas (F&G) safety system around and make it even better. The new and improved AutroSafe Integrated Fire and Gas (IFG) 4 is designed for the toughest requirements and expands the possibilities of a F&G detection system even further. From offshore platforms to LNG plants to refineries, AutroSafe IFG 4 delivers the most rigorous F&G safety yet.

Autronica Fire and Security launched AutroSafe, our high-end fire detection system, in 1999. From day one, AutroSafe has proven its unique stability and reliability in more than 15 000 of installations worldwide, both on- and offshore.

AutroSafe IFG 4 provides advanced functionality for a wide range of applications. The system is designed to meet all requirements in the high-end segment of the offshore market.

It is certified according to European directives (CPD) requiring EN 54 compliance, and is approved by Factory Mutual (FM) according to NFPA 72. Additionally, the F&G system is designed according to SIL2 requirements

Reliable communication is paramount to your safety. That's why we're adding AutroNet to the AutroSafe IFG system, an innovative network solution safeguarding communication between panels. AutroNet ensures a redundant and high-speed network, expanding the reach of the AutroSafe IFG system even further.

History proves you can rely on AutroSafe IFG. All existing functionality has stood up to the toughest tests worldwide for more than 10 years. With AutroSafe IFG 4, Autronica has once again taken fire safety to a higher level.

"AutroSafe IFG 4 delivers the most rigorous fire safety yet"

INNOVATION YOU CAN TRUST

"Should one panel fail
due to a fire & gas incident,
the other will take control"

FROM SECURE TO DOUBLE SECURE

– introducing AutroKeepers that provide dual reporting of events

AutroSafe Integrated Fire and Gas (IFG) 4 provides the highest degree of security yet by combining safety, reliability and availability.

At the basic level, the sensor units are connected in two-wired loops. Consequently, in case of a single broken or shorted loop, connection with all units is maintained. Additionally, two AutroKeeper (patent pending) units per loop make redundant control of the loop possible. This is particularly important since, should the primary loop controlling panel fail, the secondary backup panel will take control of the loop.

AutroKeepers are smart relay units that are connected to the loop, controlling a panel's access to it. They may operate in automatic, semi automatic or manual modes. The AutroKeeper makes it possible to communicate with loop units, using a secondary panel in addition to the primary one. This ensures that an alarm event is not lost in case of system node or network failure.

AutroSafe IFG 4 is certified according to European directives (CPD) requiring EN 54 compliance.

Built to deliver a higher degree of safety

- All loop units have a short-circuit isolator – no need for extra loop units
- Loops are powered from both sides – ensuring redundant loop network
- AutroSafe SelfVerify® tests each detector and manual call point every day
- Two AutroKeepers ensure that no events are lost in case of system node or network failure
- Dual network between all panels secures a redundant panel network
- Dual connections to process control systems

SELFVERIFY

– improved safety through automated testing and maintenance

When launched in 1999, AutroSafe SelfVerify® was the premium technology enabling fire and gas detection systems to test themselves. It still is.

The necessity of reducing high maintenance costs and increasing fire security, encouraged Autronica to invest considerable time and effort in developing this unique technology. Over the last decade it has proven its worth in over 15 000 applications in onshore, offshore and maritime installations.

"Quite possibly the safest and most reliable fire safety system available – ensuring optimal detection"

The self-testing system

Most fire detection systems depend on costly and often irregular manual inspections, which involve a number of challenges and problems:

- Detectors may be out of reach
- Service engineers may not have access to particular areas
- Manual testing with gas or smoke is not reliable
- Test gas or smoke is rarely used in calibrated quantities
- Even a faulty detector will eventually react if its chamber is filled with enough smoke
- Excessive and irregular intervals between manual tests of detectors, leaving damaged detectors unnoticed for far too long

AutroSafe SelfVerify® solves all issues of manual maintenance, making time consuming and costly physical testing no longer necessary. With AutroSafe SelfVerify®, the system checks all detectors, interfaces, connections and cables – from detector chamber to alarm output – every single day.

Not only does the system test whether a detector is capable of provoking an alarm, it even verifies the sensitivity of every detector with a calibrated signal. The SelfVerify system ensures that each detector always responds to the correct alarm level. In the event of irregularities, the display on the operating panel will accurately pinpoint the source of any problem.

AutroSafe SelfVerify® is developed for worldwide standards and regulations, and the detectors are certified according to European directives (CPD) requiring EN 54 compliance.

AutroSafe SelfVerify® ensures that you have the safest and most reliable fire safety system available – a system ensuring optimal detection.

MORE RELIABLE MAINTENANCE
FAR LESS TIME AND COST

MAXIMUM CAPACITY
MINIMUM DOWNTIME

AUTRO SAFE IFG Integrated Fire & Gas
Self Verify®

THE NEW AUTROSAFE 4

– single-point access

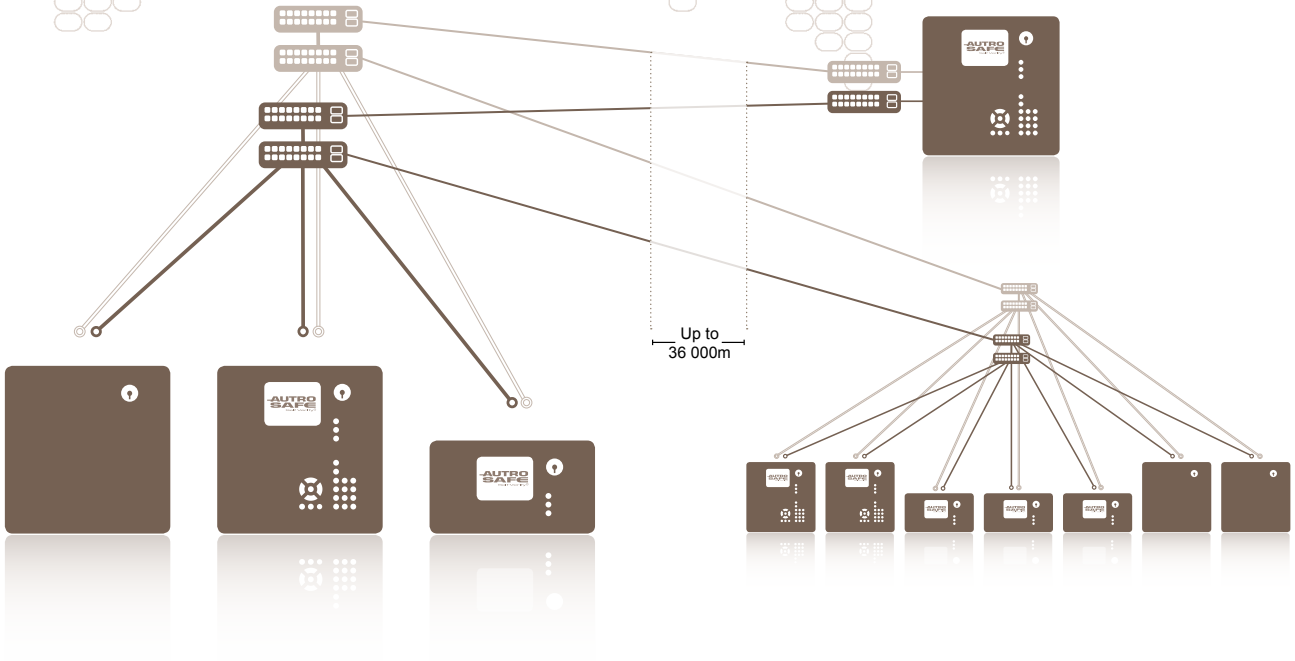
AutroSafe Integrated Fire and Gas 4 systems are managed through a single point of operation for the download of configuration data or program upgrades. This ensures a faster and safer method to change or upgrade the system program, using the panel network (AutroNet) or a USB memory stick. The result is minimum downtime, through quick and easy modifications during commissioning.

LARGE CAPACITY

– without compromising security

Our Ethernet-based panel network, AutroNet, connects the different panels through a high-speed (100Mbps) redundant system, delivering solid, reliable performance in line with current regulations.

- 64 fire alarm panels
- 15 000 loop units connected to one system
- 6 detector loops per panel
- 127 loop units connected to one detector loop
- 15 loop units connected to one PowerLoop
- 31 loop units connected to AutroFieldBus
- Event log with up to 10 000 events



INTEGRATED 3RD PARTY INTERFACE
– granting unlimited communication options

AutroSafe IFG 4 communicates with equipment using the following protocols

- MODBUS – allowing connectivity with Programmable Logic Controllers (PLC)
- AutroCom – allowing interface to control and monitoring systems (AutroMaster)
- ESPA 4.4.4 – allowing connectivity with devices such as AutroTel alarm routing via telephone networks and pocket paging systems
- NMEA-0183 – allowing connectivity with devices such as the maritime Voyage Data Recorder (VDR)

AutroSafe IFG 4 includes the following communication ports

- 2 Ethernet ports for AutroNet, AutroCom and configuration data/system software upgrade
- 1 AL_Com+ port (interfacing loop drivers and I/O units)
- 1 RS-232, RS-422 or RS-485 (AutroCom/ESPA4.4.4/MODBUS/VDR)
- 1 AutroFieldBus interface
- 2 USB host ports for printer/USB memory stick (configuration data and system software upgrade)
- FailSafe relay output

CLEAN DESIGN AND PERFORMANCE
– balancing intuitive user interface with high technology

During normal operation, the power indicator will always display a steady green light when the power is ON. No disrupting or unnecessary information is shown, only indicators relevant to the actual condition are visible.

IMPROVED FLEXIBILITY
– adjustable to any environment

You can change multisensor operation class, adjust a single detector or a group of detectors or operate class switch for a period of time.

PROVEN LOOP UNITS
– a wide range for any application

All types and series of AutroSafe detectors, manual call points, I/O units and sounders can operate on the same detection loop.

AUTRO SAFE IFG
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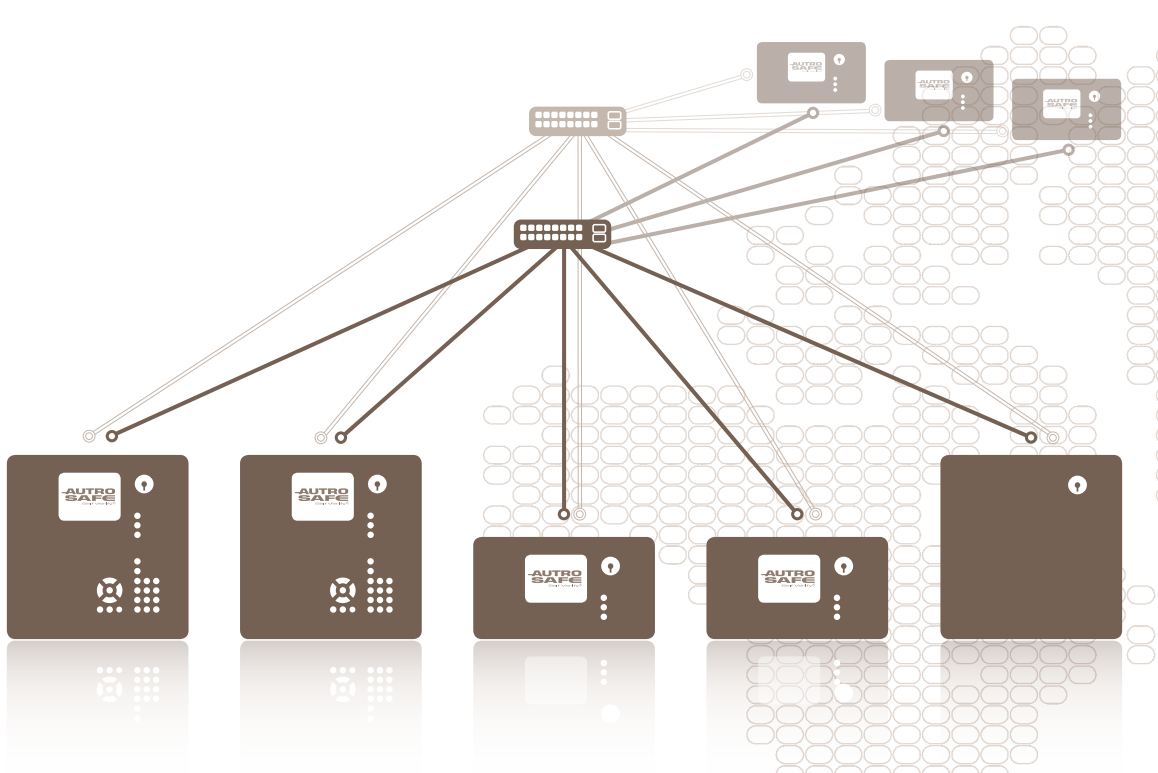
INTRODUCING AUTRONET

– a new standard in reliable data and information transmission

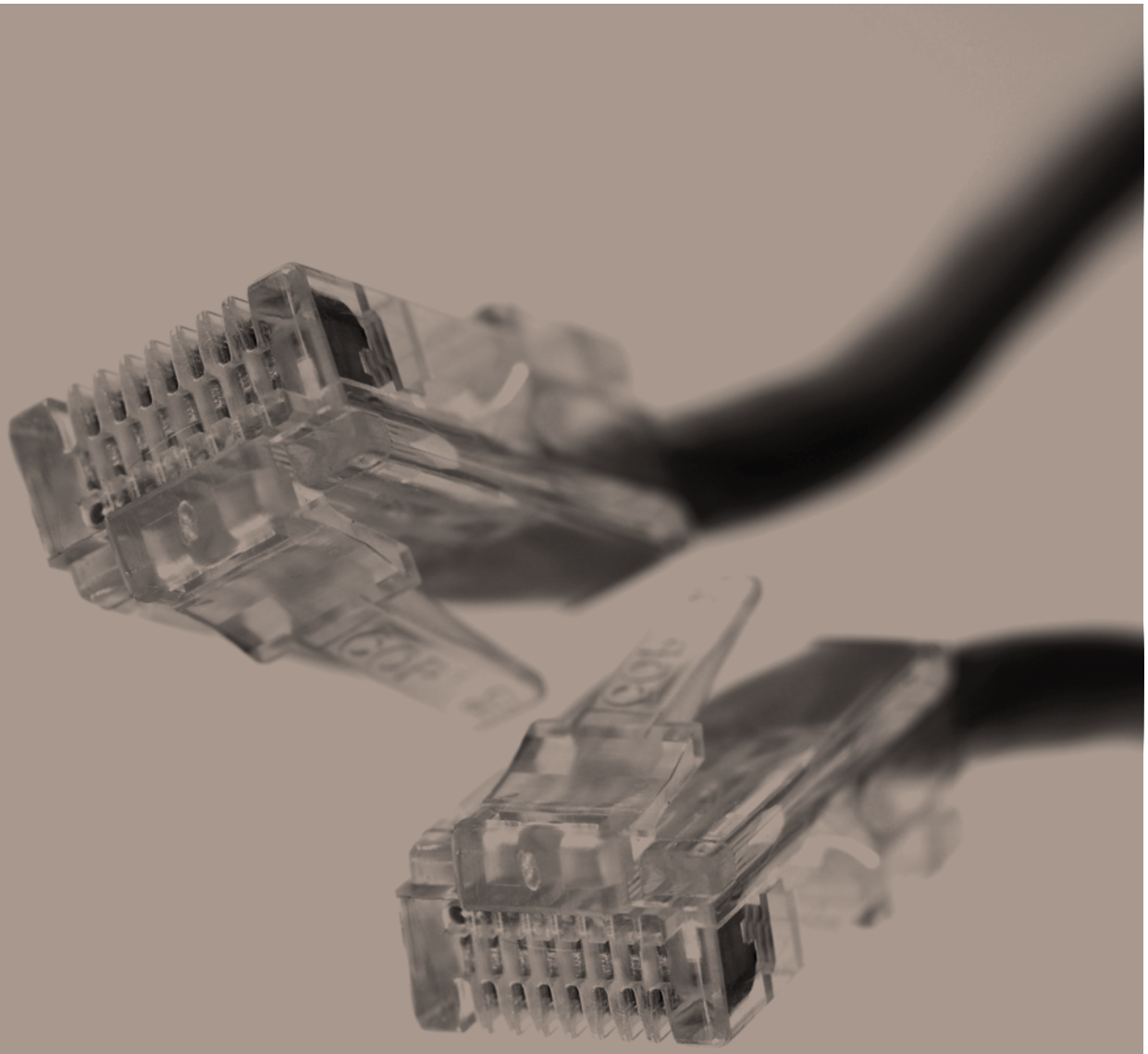
To provide maximum dependability, Autronica has developed AutroNet – a dual path transmission network based on a high-bandwidth Ethernet network (100Mbps) suitable for safety-critical systems.

AutroNet secures the transmission of data and information even if a line fault (break, switch port fault etc.) is present. Alarms are transmitted safely to all panels because all network traffic is duplicated along two independent network paths.

The unique combination of AutroNet and AutroSafe IFG results in a flexible and reliable system which is easy to maintain, modify and expand.



"Flexible and reliable – easy to maintain, modify and expand"



DUAL PATH
TWICE AS SECURE

AUTROMASTER ISEMS

– making sure you're in control

AutroMaster ISEMS is an Integrated Safety and Emergency Management System combining the strengths of a powerful fire detection system with control and monitoring functions dedicated to make sure you are in control in case of a fire and gas incident.

Graphical user interface

The AutroMaster provides an intuitive control and monitoring interface built to save valuable time when every second counts.

Status information is displayed in real-time with easy-to-understand graphical representation. Navigation is fast and instinctual and the powerful zoom functions allow you to monitor all areas in great detail.

AutroMaster displays values for gas density, smoke and heat in dynamic colours, making it easy to take the necessary actions during emergencies.

Interoperability

Control and monitoring of third party systems can easily be performed via serial protocols or network interfaces. They provide connection to basically any source – network time servers, telephone systems for text messaging, public address systems for automated voice messaging, emergency lights, access control systems, CCTV, automation systems and so on.

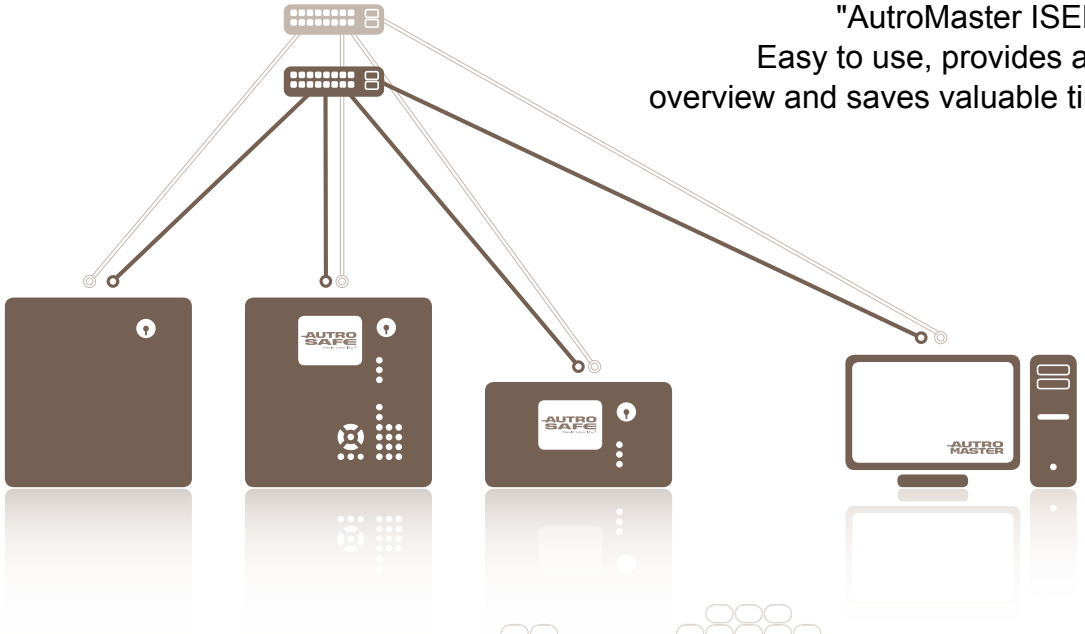
Logging and reporting

The AutroMaster keeps track of all events in the system and has a built-in report generator. This provides a cost-effective system log for maintenance and documentation purposes.

Decision-making tools

In high-risk environments around the world, a seemingly innocuous fire can quickly escalate into an emergency of large proportions. When disaster strikes and you only have seconds to make the proper decisions, the right safety and emergency management system is an invaluable asset. The AutroMaster includes a Decision Support System (DSS) that will help you make the right decisions at the right time.

"AutroMaster ISEMS:
Easy to use, provides a full
overview and saves valuable time"



OPC SERVER

– for complete integration

With the AutroSafe IFG OPC server, we accomodate communication between fire detection systems and controlling emergency systems. This way we have increased the interoperability between our system and 3rd party supervisory systems.

The AutroSafe IFG OPC server provides a standard OPC interface for the AutroSafe Integrated fire and gas detection system. OPC (OLE for Process Control) is a software standard issued by Windows-based applications to access data from process control systems. The basic principle of OPC is that OPC client applications communicate with an OPC server via a standardized, open and vendor-independent interface.

AUTRONICA FIRE AND SECURITY AS

– a leading innovator of safety

Autronica is a leading innovator, manufacturer and supplier of fire and gas safety equipment. Our products ensure safety in applications on land and sea worldwide. The company is owned by United Technologies Corporation (UTC) and employs more than 380 people with great skill and experience in the developing, manufacturing and marketing of fire and gas safety equipment. Autronica Fire and Security AS is an international company based in Trondheim, a dynamic city known as the technological hotspot of Norway.

Protecting life, environment and property...

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